½ plicæ principalis æquans. Long. (spec. fig.) 18·8, lat. 3 millim. apert. alt. 3·5, lat. 2.5 millim. Long. (spec. max.) 21, lat. 3 millim.; apert. alt. 3·6, lat. 2·6 millim.

Hab.: Tongo Mts., Sumbawa (Doherty).

The name of these mountains appears to be also spelt Dongo, but the spelling varies with different authors, as indeed does that of nearly all the localities mentioned in this paper.

The landshells known from Sumbawa are as follows:-

Nanina rareguttata, Mousson. Also from Bali, Flores, &c.

N. bimaensis, Mousson.

N. halata, Mousson.

These appear to be peculiar to Sumbawa.

* N. nemorensis, Müll. Also from Lombok and the Celebes.

*Amphidromus contrarius. Also from Flores, &c. Clausilia recondita. Peculiar to Sumbawa.

NOTES ON THE SPECIES OF PALUDOMUS INHABITING BORNEO.

BY EDGAR A. SMITH, F.Z.S.,

Zoological Department, British Museum, London.

Five species of *Paludomns* from Borneo have already been described. Most of these present a very close family likeness; indeed, two of them, *P. luteus*, H. Adams, and *P. moreleti*, Issel, have already been united by Brot. This author's *P. isseli* is a little larger, but lacks the fine decussation of the epidermis which is present in *luteus*. *A. broti*, Issel, is still larger and remarkable for its globose form and extensive aperture. *A. lacunoides*, Aldrich, attains even greater dimensions than *A. broti*, and is distinguished by a peculiar circumscribed "flattened semilunar space" on the left of the columella, beneath the umbilical region. It also, in young examples, exhibits colour bands, a feature which is not present in other Bornean species.

A series of specimens presented to the British Museum by Mr. A. Everett, who also collected them in the Batang Lupar district of Sarawak, do not agree exactly with any of the forms referred to, and consequently it seems advisable, notwithstanding their evident relationship with *P. isseli* and *P. lacunoides*, to regard them as specifically distinct.

^{*} I give these on the authority of Dr. O. Boettger, in litt.

It is a case in which we must "lump" all the various forms, considering them as variations of one and the same species, or else divide them up as best we may. Unfortunately there is a difficulty which is constantly confronting the systematic zoologist. A gigantic "lumping" is unphilosophic, but a too minute "splitting" is still worse. The "happy medium" is perhaps the safest course to tread, our decisions being the result of (as far as we can accomplish it) our careful and candid judgment. The Bornean species of *Paludomus* are as follows:—

1. Paludomus lacunoides, Aldrich.

P. lacunoides, Aldrich. Journ. Cincinnati Soc. Nat. Hist., 1889, vol. xii., p. 23, pl. iii, figs. 1-1c.

Hab.: Borneo.

The exact locality is not stated by Mr. Aldrich, but from the introductory remarks to his paper it is probable that this species occurs at the South-eastern part of the island.

2. Paludomus broti, Issel.

P. broti, Issel. Ann. Mus. Civ. Storia Nat., 1874, vol. vi., p. 455, pl. vii, figs. 19, 20.

P. broti, Brot. Conch. Cab. (Paludomus), p. 32, pl. vii, figs. 12, 12a. Hab.: Sarawak.

3. Paludomus isseli, Brot.

P. isseli, Brot. Op. cit., p. 31, pl. vii., figs. 7, 7a, 8.

Hab.: Sarawak.

This species was founded on specimens which Issel originally referred to the Indian *P. crassus*, to which it bears a very close resemblance.

4. Paludomus luteus, H. Adams.

P. luteus, H. Adams. Proc. Zool. Soc., 1874, p. 585, pl. lxix, figs. 5, 5a.

P. luteus, Brot, partim. Op. cit., p. 46, pl. viii., figs. 11, 11a.

Hab.: Borneo.

Distinguished by its yellow decussated epidermis, and the slightly convex whorls being without any depression or constriction below the suture.

5. Paludomus moreleti, Issel.

P. moreleti, Issel. Op. cit., p. 456, pl. vii., figs. 21, 22. P. luteus, Brot, partim. Op. cit., p. 46, pl. viii., figs. 14, 15. Hab.: Sarawak (Doria, Beccari, and Hose).

A series of this species presented to the British Museum by Mr. C. Hose contains three or four examples with the spire complete. In this condition it has a very accuminate appearance, the apex being minute and pellucid, if not coated with an earthy deposit.

The almost smooth whorls which are constricted below the suture, the dark olive colour and smaller size, are features which

may separate this species from the preceding.

6. Paludomus everetti, sp. nov.

Testa globosa, turrita, crassa, epidermide fuscoolivacea induta; spira acuminata, ad apicem sæpe
erosa; anfractus circiter 8, convexi, superne infra
suturam concave depressi vel constricti, in concavitate
lineis spiralibus impressis 2-3 striati, ultimus striis
paucis aliis distantibus circa basim distinctioribus
sculptus, antice paulo descendens; apertura subovata,
longil, totius ½ paulo superans, intus cæruleo-albida;
peristoma continuum, subpatulum, in exemplis adultis
aurantiacum, in junioribus pallidum, margine dextro
obsolete crenulato. Longit. 30 millim., diam. maj. 22,
min. 17. Apertura cum perist, 17 longa, 12 lata.

Hab.: Batang Lupar district, W. Sarawak, also Gomanton on the N.E. Coast at Sandakan Bay.

This is a larger and more globose form than *P. isseli*, and differs also from that species in the whorls being concave below the suture, in the spiral impressed lines and the more ovate or less acuminate aperture. Its greatly superior size distinguishes it from *P. moreleti*; the want of colour-bands, and the absence of the "flattened semicircular space" behind "the columella," may separate it from *P. lacunoides*, which it otherwise resembles in many respects. It appears to exhibit more transverse sculpture, and the orange lip may be characteristic, although I have not seen this peculiarity in any of the specimens from Gomanton.

NOTE ON A SPECIES OF LIMAX FROM IRELAND.

BY WALTER E. COLLINGE,

Mason College, Birmingham.

I HAVE recently received from Mr. Jas. N. Milne, Derry, a single example of a large *Limax* which at present I am unable to determine. I have, some short time ago, described a species of *Arion*,* at present

^{*} Ann. Mag. N.H., 1893, vol. xii, pp. 252-4, pl. ix.